

What is claimed is:

1. A method of drawing an optical fiber, the method comprising the steps of:

(a) feeding an optical fiber preform into a drawing furnace;

(b) adjusting the inner diameter of a seal ring located at the top portion of
5 the drawing furnace while feeding the optical fiber preform;

(c) feeding a gas into the drawing furnace such that the gas hits the optical
fiber preform and produces a stream that flows out at the clearance between
the seal ring and the optical fiber preform; and

(d) drawing the optical fiber preform by heating and softening the leading-
10 end portion of the optical fiber preform.

2. A method of drawing an optical fiber as defined by Claim 1, wherein the
step of adjusting the inner diameter of the seal ring is performed base on the
diameter of the optical fiber preform.

3. A method of drawing an optical fiber as defined by claim 2, the method
15 further comprising the steps of:

(a) measuring the diameter of the optical fiber preform in advance; and

(b) measuring the relative vertical position between the drawing furnace
and the optical fiber preform in advance;

the step of adjusting the inner diameter of the seal ring being performed
20 based on the measured data of the preform diameter and the relative vertical
position between the two members.

4. A method of drawing an optical fiber as defined by claim 2, the method
further comprising the step of measuring the diameter of the optical fiber pre-

form at a position directly above the seal ring;

the step of adjusting the inner diameter of the seal ring being performed based on the measured data of the preform diameter.

5 5. A method of drawing an optical fiber as defined by claim 2, wherein the step of adjusting the inner diameter of the seal ring is performed such that the difference between the inner diameter of the seal ring and the diameter of the optical fiber preform becomes constant.

10 6. A method of drawing an optical fiber as defined by claim 2, wherein the step of adjusting the inner diameter of the seal ring is performed such that the area of the clearance between the seal ring and the optical fiber preform becomes constant.

15 7. A method of drawing an optical fiber as defined by Claim 1, wherein the step of adjusting the inner diameter of the seal ring is performed in such a way that the inside pressure of a muffle tube placed in the drawing furnace becomes constant.

8. A method of drawing an optical fiber as defined by claim 2, the method further comprising the step of shifting the seal ring so that the center of the optical fiber preform can coincide with that of the seal ring whenever the optical fiber preform becomes off-center with respect to the seal ring.

20 9. A method of drawing an optical fiber as defined by claim 7, the method further comprising the step of shifting the seal ring so that the center of the optical fiber preform can coincide with that of the seal ring whenever the optical fiber preform becomes off-center with respect to the seal ring.

10. An apparatus for drawing an optical fiber by heating the leading-end portion of an optical fiber preform while feeding it into a drawing furnace, the apparatus comprising:

- 5 (a) a gas-sealing structure comprising a seal ring and a gas feeder capable of blowing a gas against the optical fiber preform;
- (b) a seal-ring actuator capable of adjusting the inner diameter of the seal ring; and
- (c) a controller for controlling the seal-ring actuator.

11. An apparatus for drawing an optical fiber as defined by claim 10, the
10 apparatus further comprising a preform diameter-measuring section that measures the diameter of the optical fiber preform at a position directly above the seal ring.

12. An apparatus for drawing an optical fiber as defined by claim 10, the
15 apparatus further comprising an inside pressure-measuring section that measures the inside pressure of the drawing furnace.

13. An apparatus for drawing an optical fiber as defined by claim 10, the apparatus further comprising a seal-ring shifter capable of shifting the seal ring so that the center of the optical fiber preform can coincide with that of the seal ring.